with H. B. Small's compliments

DOMINION OF CANADA.

INDUSTRIES AND MANUFACTURES.

COMPILED FROM

THE LATEST STATISTICS

BY

H. B SMALL.

OTTAWA.

1885.

DOMINION OF CANADA.

INDUSTRIES

ERRATUM.

On page 7, for "Grain, 1,304,993 bushels," read 13,104,993.

BY

H. B. SMALL.

OTTAWA.

1885.

27 J.

ERRATUM.

On page 7, for "Grain, 1,304,993 ... bushels," read 13,104,993.

DOMINION OF CANADA.

INDUSTRIES AND MANUFACTURES.

COMPILED FROM

THE LATEST STATISTICS

BY

H. B. SMALL.

OTTAWA.

1885.

ENTERED ACCORDING TO ACT OF PARLIAMENT OF CANADA, IN THE YEAR 1885, BY H. B SMALL, IN THE OFFICE OF THE MINISTER OF AGRICULTURE.

INDUSTRIES AND MANUFACTURES.

—o—

The commercial importance of each of the provinces forming the Dominion of Canada is now generally known throughout Europe, and the efforts that have of late been made to develope their resources and extend their trade, have been attended with the most satisfactory results. The system of inland navigation in Canada is the most extensive and perfect in the world. The vast territorial extent, mineral wealth, fertility of soil, unparalleled fisheries, and extensive forests of the combined provinces are already understood and valued abroad. No mountain barriers interpose to divide the people into hostile clans, or divert the currents of trade in their flow to the markets of the world. With the boundless fields of coal on either shore—in Nova Scotia, on the Atlantic, and in British Columbia, on the Pacific coast—with a climate most favourable to the developement of human energy, it is impossible for the mind to assign a limit to the future growth of the trade, industries, and commerce of Canada.

The simplest method of obtaining an accurate idea of the trade of the Dominion is by reference to the official returns made by Government in its annual report of Trade and Commerce, and from the value of the chief staples of export given therein the reader can draw his own inference. The number of seagoing vessels entered inwards during 1883-4 was 11,160, with an aggregate of 4,250,665 tons register. The inland trade upon the rivers and lakes is shewn by 16,768 vessels, with an aggregate of 3,084,924 tons, and the coasting trade is indicated by 15,213 arrivals during the same period, with an aggregate of 3,940,355 tonnage.

The remarkable system of inland navigation which Canada possesses, both by means of its great rivers, lakes and canals, is a material factor in promoting its industries. The long stretch of navigable waters from the entrance of the River St. Lawrence to the head of Lake Superior, extending 2384 miles, with a difference in level over the whole distance of six hundred feet is made accessible to vessels by a series of canals and locks where requisite, maintained at the public cost, and the great railway system of the country, stretching through and all over the provinces, affords a means of transport to all, both in the way of freight and passenger traffic. The Marquis of Lorne, the late Governor General, in a speech at Glasgow last year, said as follows on Canada:—"If you look at the Public Works of the people—small in number, for even now they are only five millions strong—right up from the sea to the great interior of the country, it is perfectly marvellous what has been accomplished. Look at what they have done along the whole course of the water channel of the St. Lawrence up through the great lakes, having wide canals with fourteen feet of water over the sills, taking ships of 1400 tons burthen up several rapids into the long chain of water communication until they can be launched successfully into the waters of the inland sea, Lake Superior."

Great facilities are afforded, both in Banking and Insurance, for all commercial operations, and the stability of Canadian monetary institutions is firmly assured by Government supervision and inspection. The status of the Banking institutions is alluded to on a subsequent page.

IMPORTS AND EXPORTS.

The tables that follow are taken or compiled only from official returns.

For the year ended 30th June, 1884, the latest date available, the total imports into Canada were.....$108,180,644
And the total exports of only the *actual products* of Canada were..... 77,132,079

The exports of the *actual products* are best adapted to afford information as to the actual state of trade. These shipped from Canadian ports are thus classified

Produce of the Mines	$3,247,092
" " Fisheries	8,591,654
" " Forest	25,811,157
Animals and their products	22,946,108
Agricultural products	12,397,843
Manufactures products	3,577,535
Miscellaneous products	560,690
In all	$77,132,079

In the above figures only the produce of Canada itself is enumerated, and no notice is taken of articles in transit not the produce of Canada, the principal of which come from the Western United States.

PRODUCTS OF THE MINE.

Material.	Produce of Canada.		Value.
Coal,	Tons,	451,631	$1,201,172.
Gold bearing quartz, dust and nuggets.			952,131.
Gypsum,	Tons,	155,851	160,607.
Antimony, ore,	"	132	4,855.
Copper,	"	1,677	214,044.
Iron,	"	25,308	66,549.
Lead,			5.
Manganese,	"	885	15,851.
Silver,	"	37	12,920.
Phosphate of Lime,	"	21,417	453,322.
Slate,	"	864	11,445.
Sand and Gravel,	"	61,575	14,152.
Stone and Marble,	"	12,954	52,478.
Salt, bushels,	"	181,742	17,408.
Oil, Mineral, crude,	gall.,	325,461	7,043.
Refined,	do.	2,102	503.
Other Articles,			62,607.
			$3,247,092.

PRODUCE OF THE FISHERIES.

The total value of the Fisheries of Canada, for the year 1884, may be approximately stated as follows:—

Nova Scotia	$6,[illegible]6,264
New Brunswick	3,730,453
Quebec (estimated)	1,800,000
British Columbia (estimated)	1,500,000
Ontario do	1,000,000
Prince Edward Island	1,086,004
Total,	$17,852,721

During the past ten years the value of the catch of Fish is shown by the following statement:—

	Value.		Value.
1874	$11,681,886	1879	$13,529,254.
1875	10,447,886	1880	14,499,979.
1876	11,116,999	1881	15,817,161.
1877	12,005,934	1882	16,824,092.
1878	13,215,678	1883	16,958,192.
Total	$58,468,383	Total	$77,628,679.

1884 ..... $17,852,721

And the value of the exports as follows:—

	Fish and Products of Fish Exported. Produce of Canada.	Not Produce of Canada.		Fish and Products of Fish Exported. Produce of Canada.	Not Produce of Canada.
1874...	$5,292,368	$104,359	1879...	$6,928,871	$143,332
1875...	5,380,527	5,232	1880...	6,579,656	73,691
1876...	5,500,989	232	1881...	6,867,715	31,169
1877...	5,874,360	.....	1882...	7,682,079	15,529
1878...	6,853,975	75,391	1883...	8,809,118	47,808
			1884...	8,591,654	17,687
Total...	$28,902,219	$185,214		$45,459,093	$329,216

Number of Vessels, Boats, Men, and Nets employed in the Fisheries of the Dominion, the catch of the various kinds of Fish, the yield of Fish Oils, &c., as given in the census of 1881.

	Aggregates for the Dominion.	Totals for Prince E'w'd Island.	Totals for Nova Scotia.	Totals for New Brunswick.	Totals for Quebec.	Totals for Ontario.	Totals for Manitoba.	Totals for British Columbia.	Totals for the Territories.
Vessels Employed.....No.	1,147	25	755	205	146	5	1	10	....
Men ..... "	8,440	127	6,854	743	677	14	4	21	....
Boats Employed..... "	30,427	2,704	13,214	4,28[illegible]	6,761	1,[illegible]	1,000	1,12[illegible]	200
Men..... "	43,621	5,226	17,782	5,956	9,974	2,101	1,322	1,024	236
Shoremen..... "	7,9[illegible]	439	2,291	616	4,093	76	...	477	....
Nets ....Fathoms.	3,450,25[illegible]	59,798	1,171,394	336,089	435,307	928,008	99,172	37,695	41,501
Fascines..... No.	3,868	13	793	333	1,639	681	3	406	....
Cod ..... [illegible]ls	1,130,771	18,736	587,203	62,444	46,388	....	....	....	....
Haddock, hake & pollock "	192,539	7,656	128,578	49,716	6,589	....	....	....	....
Herrings .....Brls	574,503	21,501	140,831	263,832	130,354	15,605	...	2,330	...
Gaspareaux..... "	28,856	956	11,348	16,175	42	....	....	335	....
Mackerel..... "	248,081	91,792	120,242	25,272	10,725	....	....	...	....
Sardines ..... "	25,384	4	85	20,935	4,360	....	....	...	....
Halibut..... "	2,799	11	2,0[illegible]8	43	657	...	....	...	....
Salmon ..... "	73,897	23	1,583	19,276	2,910	....	....	50,105	....
Shad..... "	10,385	4	6,776	1,700	1,864	41	....	....	....
Eels ..... "	8,012	197	1,520	584	5,601	110	....	....	....
Whitefish..... "	48,781	.....	14	40	886	38,301	4,350	77	5,113
Trout ..... "	64,324	42	307	355	6,916	55,497	36	1,057	114
Other Fish..... "	170,052	425	16,962	23,682	82,965	18,666	17,795	8,918	619
Canned Lobsters .... Lbs.	11,983,648	3,275,316	3,841,476	4,349,122	517,734	....	...	...	....
Oysters.....Brls.	189,127	175,408	2,407	11,116	156	....	....	40	....
Fish Oil.....Gals	870,323	8,139	275,352	78 470	263,374	1,629	1,444	237,492	4,432

EXPORT OF FOREST PRODUCTS OF CANADA FOR 1883-4.

ONTARIO—		
Rough products	7,618,492	
Agricultural implements	13,017	
Carriages	10,337	
Furniture	114,151	
Doors, Sashes, Blinds	56,304	
Woodenware	104,298	
		7,916,599
QUEBEC—		
Rough products	11,392,854	
Agricultural implements	4,143	
Carriages	5,880	
Hemlock Bark Extract	77,462	
Ships	125,495	
Furniture	11,935	
Doors, Sashes and Blinds	2,700	
Woodenware	292,270	
		11,912,739

NOVA SCOTIA—		
Rough products	1,522,677	
Agricultural implements	20	
Carriages	3,415	
Hemlock Bark Extract	142,980	
Ships	81,707	
Furniture	1,618	
Woodenware	21,871	
		1,774,288
NEW BRUNSWICK—		
Rough products	4,795,956	
Carriages	811	
Hemlock Bark Extract	140,714	
Ships	86,954	
Furniture	62	
Doors, Sashes and Blinds	641	
Woodenware	11,201	
		5,036,339
BRITISH COLUMBIA—		
Rough products		458,565
PRINCE EDWARD ISLAND—		
Rough products	22,613	
Carriages	118	
Ships	122,600	
Woodenware	309	
		145,640
MANITOBA—		
Rough products		
Agricultural implements	72	
Carriages	1,195	
Furniture	3,939	
Woodenware	396	
		5,602
		$27,249,772
Rough Products	$25,811,157	
Manufactures of Wood	1,438,615	
		27,249,772

N. B.—The above includes produce of Canada, and produce passing through but shipped from Canada. The value of the produce of Canada was.....$25,811,157
And of not produce of Canada..... 1,438,615

ANIMALS AND THEIR PRODUCTS.

Articles.	*Produce of Canada.*	*Value.*
Horses	11,595	$1,617,829
Horned Cattle	89,263	5,681,082
Swine	3,883	14,243
Sheep	304,403	1,544,605
Poultry and other animals		192,908
Bones (cwt.)	57,528	47,527
Butter (lbs.)	8,975,537	1,612,481
Cheese (lbs.)	69,755,423	7,251,989
Eggs (doz.)	11,490,855	1,960,197
Furs		1,119,756
Grease (lbs.)	52,892	1,984
Hides and Horns		435,898
Honey (lbs.)	1,079	178

...d	214,772	21,425
...ats	11,151,125	1,037,517
..., Neats Foot and other (gals.)	1,300	466
...eep's Pelts (number)	101,987	28,740
...low (lbs.)	136,521	8,929
...ol (lbs.)	1,501,031	310,060
...er articles		58,294
		$22,946,108

AGRICULTURAL PRODUCTS.

...ticles.	*Produce of Canada.*	*Value.*
...n (cwt.)	52,072	$46,637
...x (cwt.)	5,312	73,779
...x Seed (bushels)	437	540
...uit, green (brls.)	51,019	173,048
...our and Meal (brls.)	264,648	1,286,618
...rain (bushels)	1,304,993	9,154,865
...ay (tons)	108,461	913,057
...ops (lbs.)	117,266	16,402
...alt (bushels)	235,959	178,330
...aple Sugar (lbs.)	391,348	25,018
...otatoes (bushels)	753,435	231,716
...eds		80,464
...raw, tons	3,574	15,418
...obacco Leaf (lbs.)	118	25
...egetables		92,280
...ther articles		109,646
		$12,397,843

To give an idea of Canadian agricultural products, as far as manufacture of them is concerned, the following comparative tables will show the increase in ten years of these industries, taken from official returns:

		1881.	1871.
...ome-made Butter	lbs.	102,545,169	74,190,584
...ome-made Cheese	lbs.	3,184,996	4,984,843
...axseed	bush.	108,694	118,044
...ax and Hemp	lbs.	2,056,353	2,584,765
...ome-made Cloth	yds.	7,040,259	7,641,917
...ome-made Linen	yds.	1,293,802	1,771,140
...pples	bush.	13,377,655	6,365,315
...rapes	lbs.	3,896,508	1,126,402
...ther Fruits	bush.	841,219	358,963
...aple Sugar	lbs.	20,556,049	17,276,054
...obacco	lbs.	2,527,962	1,595,932
...ops	lbs.	905,207	1,711,789
...urs	value	$987,555	$738,038

The amount manufactured in the butter and cheese factories is not stated, the value only being given. In butter factories in 1881, the capital invested was $97,027, and the value of products, $341,478; in cheese factories the capital was $1,021,435, and the value of the products, $5,464,454. In the manufacture of the latter article there is a very wide field for investment, and the returns well repay any outlay.

CHEESE AND BUTTER EXPORTED FROM CANADA, FROM THE YEAR 1874 TO 1884.

Year.	Cheese.		Butter.	
	Pounds.	Value.	Pounds.	Value.
		$ cts.		$ cts.
1874	24,050,982	3,523,201 00	12,233,046	2,620,305 00
1875	32,342,030	3,886,226 00	9,268,044	2,337,324 00
1876	35,024,090	3,751,268 00	12,250,066	2,540,894 00
1877	35,930,524	3,748,575 00	14,691,789	3,073,409 00
1878	38,054,294	3,997,521 00	13,006,626	2,382,237 00
1879	46,414,035	3,790,300 00	14,307,977	2,101,897 00
1880	40,368,578	3,893,366 00	18,535,362	3,058,069 00
1881	49,255,523	5,510,443 00	17,649,491	3,573,034 00
1882	50,807,049	5,500,868 00	15,161,839	2,936,156 00
1883	58,041,387	6,451,870 00	8,106,447	1,705,817 00
1884	75,835,557	7,823,620 00	8,473,976	1,674,763 00
	486,126,149	51,876,258 00	143,684,663	28,003,905 00

It is very satisfactory to notice the increasing foreign demand for Canadian cheese, which is classed abroad among "American." Indeed, so popular has it become that the Manager of the largest Dairy Association in Scotland has made inquiries into the Canadian methods of production, and in reply the Ontario Dairy Association sent over to Glasgow one of their best manufacturers to impart all the information in his power. This industry here, is rapidly assuming very great importance.

MANUFACTURES EXPORTED, 1883-4.

Article.	*Produce of Canada.*	*Value.*
Agricultural Implements		$17,252
Books, Maps and Pamphlets		105,486
Biscuits (cwt.)	3,927	18,031
Candles, (lbs.)	6,463	1,109
Carriages, Carts, &c., (No.)	318	21,756
Clothing		15,521
Cordage and Ropes		14,598
Cottons		10,931
Extract of Hemlock Bark (brls.)	27,946	361,156
Furs		5,366
Glass and Glassware		1,825
Grindstones		40,492
Gypsum, ground		12,321
Hats and Caps		655
India Rubber		4,208
Iron, pig and castings		257,337
Junk and Oakum (cwt.)	14,629	32,574
Leather		518,742
Lime		10,402
Liquors and Wine		15,485
Machinery		82,491
Musical instruments		98,089
Oil Cake, (cwt.)	4,310	6,947
Oil, (gals.)	20,268	7,845
Rags		12,799
Sewing Machines (No.)	8,093	95,326

Ships (sold)		416,756
Soap (lbs.)	156,828	6,855
Starch (lbs.)	2,675,160	69,097
Steel and Steelware		30,781
Stone and marble, wrought		18,469
Sugar		57
Tobacco		30,924
Vinegar, (gals.)	82	26
Wood, manufactures		621,695
Woollens		41,060
Other articles		573,073
		$3,577,535

FOREIGN TRADE.

The following table shows the trade with the various countries of Europe in 1883-4:

Country.	*Imports from.*	*Exports to.*
Great Britain	$43,418,015	$37,410,870
France	1,769,849	390,955
Germany	1,975,771	195,575
Holland	318,477	15,500
Belgium	459,150	287,318
Spain	504,477	144,092
Portugal	67,983	172,252
Switzerland	242,380	
Austria	82,595	412
Italy	75,348	247,151
Turkey	128,662	700
Greece	160,802	
Denmark	7,878	19 850
Norway and Sweden	28,100	117,229
Russia	4,318	59

As the industries of a country are the best evidence of its prosperity and progress or otherwise, so the best idea can be formed of the actual state of trade, and what branches of industry are most adapted for the investment of capital, by examining their record. The experience of those engaged in industrial manufactures, will be suggestive as to which of them attention can be most profitably given, and which are the most likely to attract the notice of the foreign capitalist and manufacturer.

The following extracts from the Budget Speech of the Finance Minister in Parliament during the spring of the present year (1885), bearing on manufacturing interests, are of great importance, and coming from such high official authority, their correctness is unquestionable:

"I may state that there was a large increase in the trade of the Dominion in the last five years. The increased production of our manufactures, as shown by the returns submitted to the Government and laid on the table of the House, must have diminished the value of the imports of manufactured goods for the five years to the extent of $100,000,000. When I say that the increased labor paid during the last year to the men and women employed in the manufactures of the country was $15,000,000 alone, you may fairly infer that for interest, on the outlay on buildings and the profits to the manufacturers, it would reach an average of $20,000,000, or for the five years $100,000,000. The imports have been necessarily decreased by the operation of this policy, and the balance of trade would have been that much larger against us had not these factories been built, and these industries established in the country; and the consequences would have been, I think, unfortunate if such had been the condition of things. So much for the question of the balance of trade. I do not desire to see the consumption of the people diminished; but what the Government prefer is that while they desire to see the consumption of the people increased they

prefer rather to see them consuming articles produced and manufactured in the country, by the labor of the country, than that they should be imported from outside and involve the necessity of sending the money out of the country to pay for them. Now I desire to give some further evidence with reference to the success of this policy in increasing the industries of this country. There is nothing perhaps that can mark more clearly the increase of these industries than the increased demand for machinery. It is known perfectly well by every man who is engaged in the manufacture of machinery, that the orders he has received and executed since 1879 have been largely in excess of his orders from 1874 to 1879."

"In addition to the increased demand at home, we find that the machinery imported from 1874 to 1879 was $3,100,018 in value, while the value of that imported from 1879 to 1884 was $8,597,300. I think this is an indication that some new life or vitality has been given to industries requiring this increased amount of machinery. Then take the article of raw-hides in order to show the development of leather manufacture. We find that the raw hides imported from 1874 to 1879 were valued at $6,419,294, and from 1879 to 1884, $9,517,744. This is some evidence of the increased demand for hides for the manufacture of leather, and the manufacture of boots and shoes and other articles made from leather."

"In 1878 only 6 per cent. of the sugar consumed in the Dominion of Canada came direct from the country of its production; last year 89 per cent. came from the country of its production, and only 11 per cent. from Great Britain and the United States. That is my answer to the statement of the hon. gentleman who said that the duty on sugar meant a great loss of revenue, and an increased cost to the consumer. The revenue received during the last year on account of the increased quantity of raw sugar imported, although the value was low, was greater than the revenue of years previous. All this shows that we have not only obtained the usual revenue from sugar, but we have given employment to a large number of people. We have restored to Canada an important industry. Our trade with the West Indies has increased by 40 or 50 per cent, and our policy with regard to sugar has been eminently beneficial to the whole Dominion of Canada."

"To show what an impetus has been given to the cotton trade since 1879, I will quote from the Trade Returns, giving the imports of raw cotton for the five years from 1874 to 1879, and compare them with the imports during the five years from 1879 to 1884. From 1874 to 1879, the imports of raw cotton amounted to 31,847,880 lbs.: from 1879 to 1884, they amounted to 94,038,219 lbs., and their value increased from $3,568,185 to $10,531,532. This, I think, will show that an impetus has been given to this industry, that there has been a large amount of cotton manufactured in the Dominion, that it has been purchased by the Canadian consumer at a very low rate, and that, considering the number of spindles that are now in Canada, and the demand that must exist for these goods, the day is not far distant when all these manufactories will be profitably employed."

"Then there is the question of the effect of the general policy upon the development of the industries of the country. I have given some evidence, I think, of of the progress of these industries, by the increased demand for machinery in the country, by the greatly increased import of cotton, by the import of hides, by the consumption of coal to drive the machinery of the country, and by various other facts which have been presented here; but there has been laid on the table of the House the result of the enquiries of two gentlemen who were appointed by the Government to examine the leading factories of the Dominion of Canada, in order to show their development since 1878. I will simply give the results of their enquiries for six months in the prominent towns and cities of the Dominion. It is estimated by them that they have visited factories employing about two thirds of the people who are engaged in the various manufacturing industries, and these are the results:

	No. of Factories.	No. hands employed	Yearly Wages paid.	Products	Capital invested.
1884.....	2,096	77,346	$24,396,165	$102,870,166	$67,293,373
1878.....	1,501	42,794	13,833,733	49,963,282	37,819,931
Increase in five years.	595	34,552	$10,562,432	$52,906,884	$29,473,442

"If we add 50 per cent. to that, supposing their calculation is correct, and the results should be found to be the same, it will appear that the adoption of this policy in 1879 has increased the number of factories in Canada by 892, the number of hands by 51,828, the yearly wages paid to the people employed by $15,843,648; the products by $79,360,126, and the capital invested by $44,210,163."

Coming to people's deposits in Banks, we find as follows:

From 1874 to 1879.		From 1879 to 1884.	
Deposits in chartered banks..	$8,499,942	Deposits in chartered banks.	$25,903,354
Deposits in savings banks.....	1,997,422	Deposits in savings banks....	20,009,853
Railway and loan companies...	5,787,576	Railway and loan companies.	9,512,731
	$16,284,940		$55,425,938

"It may be said that the increased amount of deposits in savings banks is no evidence of the prosperity of the country. But I consider it an evidence of the prosperity of the country and the financial condition of the people that they have increased their deposits in the banks from $16,000,000 to $55,000,000. The capital expended in factories since 1878-79, as shown by the return presented, is something like $44,000,000. So that, from 1879 down to the end of June last, by the deposits in chartered banks, savings banks and loan companies, by the purchase of loan companies' debentures, and by expenditure in factories, the people of this country have invested about $100,000,000 in the manner stated. I might go farther and point to the additional mileage of railways which has been built, and which has involved the expenditure of a large sum of money. I might point to the different cities in Canada, where millions have been expended in the construction of houses that have found tenants since 1879, when those alongside of the recent erections were previously to let, but now occupied. We might go further and speak of the other investments since 1879 to show that the people of Canada, and especially the masses of the people must have had a very handsome surplus during those periods from their earnings which they have thus laid by for a wet day."

"We now come to the mileage of railways, to show what has been done during the last ten years. The following statement shows the railway mileage from 1875 to 1884, constructed and open. Statement of railway mileage, 1875 to 1884:

	Constructed. Miles.	Opened. Miles.
1875	.....	4,800
1876	.....	5,157
1877	.....	5,574
1878	6,865	6,143
1879	7,077	6,484
1880	7,229	6,891
1881	7,596	7,260
1882	8,069	7,530
1883	9,066	8,805
1884	9,949	9,575

"This gives some evidence I think, of the development of the country. Then with reference to the number of failures in Canada, from 1875 to 1879 inclusive, we find that the number of failures was 9,185, with liabilities amounting to $133,128,724. From 1879 to 1885 there were 5,040 failures with liabilities of $57,467,724. The number of people engaged in business in 1884 in Canada was 69,924, so that the number of failures for that year would be equal to one failure for every 53 traders. Taking 56,000 traders, the number engaged in business during the five years ending 31st December, 1879, the average would be equal to one failure to 30¼ traders; and taking 69,994 traders, as the basis of the five years ending 31st December, 1885, the average would be equal to one failure to 75¾ traders. Now a word or two as to the general condition of the country, and of the laborers of the country. I have before me an extract from a speech made recently by the leader of the Opposition:

"'I have no hesitation in saying to you that there is one test which I have always sought to supply when I have desired to consider what the material condition

of the country was, and that test was, what is the material condition of the lowest class of honest labor in the country?'"

"'If I find the lowest class so fairly paid that there is enough for the support of a man and those dependent upon him, and something to lay up for a rainy day, I know that I need enquire no further."

"The statement of the Bureau of Statistics of Ontario shows that the blacksmiths and their helpers, the boiler makers and their helpers, the bricklayers, the carriage-builders, the carpenters, the cigar makers, the cotton mill men and their laborers, the machinists, the moulders, the painters, the plasterers and their laborers, the printers, the sewing-machine men, the tin and coppersmiths and the tool-makers, have a surplus averaging $48 at the end of the year, comparing the receipts with their expenses during the year. It is stated that the laborer works 265 days in the year, that he averages $1.13 per day, that his yearly wages are $304, and his expenditure $255, which leaves $49 for him as a surplus at the end of the year, and for a rainy day."

MANUFACTURING INDUSTRIES.

With the enormous water power possessed by most sections of the Dominion, and the facilities afforded for steam mills, in the coal producing districts of Canada, there is no reason why, by a judicious outlay of capital, every article of commerce could not be manufactured here as well and as cheaply as those now imported, and even, from the facility with which many articles of home produce for manufacturing purposes can be obtained, even cheaper.

Up to 1879, Canadian markets had been very largely supplied from foreign sources, and it was therefore, to some extent, a groping in the dark with home manufacturers as to how much of any particular article could find a market in the Dominion. The difficulty consisted in the fact that they could not possibly know enough of the consuming powers of the Dominion to produce just as much and no more than the people required. That knowledge had to be gained by experience. Producers have now learned, in most branches of manufactures, just what is called for by the consuming public, and just how much of any particular class of goods can profitably be disposed of. In consequence of this better perception of the true state of affairs, changes have been and are continually being made in the class of goods produced, and it is now a question of but a very short time when, having a thorough knowledge of the requirements of our people, manufacturers in Canada will be prepared to supply, through the labor of our own mechanics and operatives, all the demands of the market, at a profit alike to themselves and the districts in which they are located.

There is only one means by which an official report can be obtained of the Statistics connected with manufactures, and that is the tables given in the census. This, however, being taken only every tenth year, leaves a long interval in which many changes may occur, and when past the fifth year after its inception, the tables are not evidence of the actual state of affairs. The last Canadian census was taken in 1881, and in it we find the following comparative summary relating to the Industries of the Dominion:

	1881.	1871.
Amount of Capital invested	$165,302,623.00	$77,964,020.00
Value of Raw Material used	179,918,593.00	124,907,846.00
Aggregate Value of Productions	309,676,068.00	221,617,773.00
Number of Persons employed	254,935	187,942
Aggregate Wages paid	59,429,002.00	40,851,009.00
Average Wages for each person	233.11	217.36

It need hardly be stated that men, women and children are included among the "persons employed."

To more clearly illustrate the various branches of manufacturing and industrial enterprises carried on in Canadian factories and manufacturing establishments, the following details of each enterprise as given in the last census, will prove of interest:

INDUSTRIES.	1881. Capital Invested.	No. of hands employed.	Total Annual Value of Pr'd'cts.
erated Water mak'g	$318,785	401	$435,133
gric'l't'ral Implem'ts	3,995,782	8,656	4,405,397
akeries of all sorts	2,509,621	3,963	9,476,975
aking Powder Mak'g	53,100	115	129,100
'nkn'te engrav'g est	200,000	94	100,000
ark extract works	162,000	140	286,250
asket Making	88,612	227	55,651
ell foundries	15,600	13	18,000
elt and hose fact'ries	49,825	32	126,951
illiard table making	22,500	20	44,827
lack'g man'factories	82,000	23	26,000
lacksmithing	3,056,653	12,451	7,172,469
oat building	104,011	421	173,837
oiler making	132,700	330	324,253
one crushing mills	2,800	6	5,500
ook Binding	636,624	1,036	1,445,708
oots and Shoes	6,491,042	18,949	17,895,903
ooweries	4,592,990	1,411	4,768,447
rick and tile making	946,729	4,129	1,541,892
room & brush m k'g	353,325	957	762,884
utter Factories	97,027	151	341,478
utton factories	117,800	470	173,630
abinet and furniture	3,943,419	5,857	5,471,742
ar & locom'tive w'ks	1,630,598	3,154	3,956,361
arding & full'g mills	580,417	901	1,498,343
ardb'rd m'n'fact'ries	44,000	16	30,000
arpenters & joiners	1,242,531	5,702	3,893,910
arpet making	3,992	15	10,690
arriage making	3,798,861	8 713	6,579,082
arving and gilding	219,907	418	516,675
asement mills	57,400	128	91,658
harcoal burning	55,843	83	70,030
heese factories	1,021,435	2,003	5,464,454
hemic'l est'blishm'ts	522,800	223	534,600
hicory kiln	300	2	350
hocolate factory	10,000	12	27,000
hurch decorations	43,700	48	160,300
ider making	72,821	270	131,450
offee and spice mills	339,250	145	728,600
ooperages	759,311	3,277	1,808,929
ordial & syrup m'k'g	34,800	39	112,070
ork cutting	54,900	81	73,100
orset factories	38,200	320	229,000
otton factories	3,476,500	3,527	3 759,412
utlery	86,000	67	100,000
entistry	6,000	10	9,750
istilleries	1,303,000	265	1,790,800
ye'm'k'g &millin'ry	1,601,229	7,888	4,928,871
yeing and Scouring	82,558	164	118,516
ye tool making	569,435	546	657,364
ngine building	990,300	1,061	1,338,000
ng'v'g & lith'g'ph'g	492,050	474	496,718
re-proof safe mak'g	153,000	124	126,000
shing tackle mak'g	5,000	6	7,050
astings & foundry			
orking in brass,			
ron, lead, &c	1,797,897	2,194	2,684,131
ag making	300	3	900
lax & oil cloth making	105,009	20	105,000
lour and grist mills	13,857,923	6,472	41,772,372
ardwares and ma-			
achine working	7,075,911	7,789	8,863,957
atriers and hatters	1,934,862	2,350	3,352,961
eat works	5,358,490	512	1,173,181
ide works	307,000	642	569,000
love and mitt mak'g	133,589	532	424,864
ime making	169,200	83	164,097
ead & silversmithing	174,586	153	265,822
ead leaf facto	4,000	17	25,000
ndstone works	70,700	204	50,737
ardwaremithing	58,650	59	55,555
ead powder mills	131,050	87	264,200
ydraulic mills	141,150	89	57,375
ndustry Man'fact'ries	630,821	1,556	1,385,780
ndia rubber factories	851,500	525	771,000
ndian manufactures	29,586	944	88,871

INDUSTRIES.	1881. Capital Invested.	No. of hands employed.	Total Annual Value of Pr'd'cts.
Ink factories	$900	2	$2,150
Iron smelting furn.			
and steel making	2,172,100	974	1,197,514
Jewellers and watch-			
makers	490,030	778	914,769
Lamp and chandelier			
making	61,000	78	64,000
Last factories	52,700	118	77,900
Lime kilns	309,354	2,537	707,132
Linseed oil factory	25,000	20	55,000
Lock making	57,600	175	188,800
Match factories	564,847	1,062	511,250
Mathematical Instru-			
ment making	27,500	22	21,000
Mattress making	29,850	59	57,074
Meat curing	1,449,677	852	4,084,133
Miscellaneous wares	959,781	1,839	1,690,148
Morrocco m'nufact'ry	400	2	1,000
Musical Instrument			
making	669,379	941	1,220,195
Nail and tack fact'ries	1,245,500	951	1,689,450
Native wine making	86,800	36	59,620
Nut and bolt works	166,497	153	225,800
Oil cloth establish			
ments	3,30	47	9,490
Oil Refineries	1,812,700	490	4,049,685
Opium factory	51,500	3	79,000
Pail and tub factories	236,025	150	120,935
Paint & varnish works	712,415	281	1,311,300
Painters and glaziers	198,562	759	728,067
Paper manufactories	2,257,950	1,520	2,446,693
Paper bag and box			
making	122,557	258	198,474
Paper collar factory	25,000	42	25,000
Patent medicine man-			
ufactories	302,300	216	666,589
Photographic gall'ries	492,469	422	409,427
Pickle making	11,820	28	26,420
Picture frame making	3 500	2	5,000
Planing and Moulding			
mills	447,630	633	992,201
Plaster and stucco			
works	38,005	84	86,450
Pot and pearl ashes	138,604	467	345,096
Potteries	351,328	696	571,885
Prepared peat fuel fac-			
tory	120	1	600
Preserved articles of			
food	1,222 558	8,458	2,685,861
Printing offices	4,291 136	5,311	4,742,904
Pulp mills	92,000	68	63,300
Pump factories	197 517	470	377,975
Quartz crushing mills	223 000	268	200,289
Rivet factories	69,000	27	72,000
Rolling mills	697,500	699	1,026,900
Roofing felt factories	115,000	124	284,000
Rope and twine m'k'g	722 300	529	775,600
Saddle and harness			
making	1 323,845	2,911	3,233,978
Salt works	298,100	247	595,848
Sash, door and blind			
factories	1,998 858	2,878	4,872,302
Saw and file cutting	470.150	362	859,360
Saw mills	25,487,233	2,085	38,541,752
Scale factories	79.940	52	80,000
Screw Factory	200,000	66	50,960
Scutching mills	220 050	992	431,062
Sewing machine fac-			
tories	921 260	1,188	1,048,277
Shingle making	448 147	2,389	766,998
Ship material making	224 325	394	586,573
Ship yards	1,570.916	4,464	3,587,208
Shirt, collar and tie			
making	441,951	1,491	1,255,614
Shook & fishbox m'k'g	111.670	293	238.795
Silk mills	131,700	211	275,000

INDUSTRIES.	1881. Capital Invested.	No. of hands employed.	Total Annual Value of Pr'd'cts	INDUSTRIES.	1881. Capital Invested.	No. of hands employed.	Total Annual Value of Prod'cts
Skate factory	$6 000	20	$9,000	Thread making	$15,000	130	$19,000
Soap & candle mak'g	916,025	479	1.956,658	Tin and sheet iron working	1,998,054	3,685	2,788,245
Spike and railway chair factory	38,000	41	144,000	Tobacco pipe fact'ries	18 830	64	20,300
Spinning wheel factories	26,024	41	24,912	Tobacco working	1,829,420	3,757	3,060,306
Spring and axle factories	135,200	196	246,400	Tree-nail and wedge making	500	2	1,400
Starch factories	308,000	141	212 000	Trunk and box m'k'g	383.578	628	677,877
Stave mills	124.300	265	168 520	Type Foundries	83,000	56	76,550
Steel b'rb f'nce f'ct'ry	3.000	3	12,000	Vermicelli and macaroni making	23,000	22	22,500
Stone & marble cutting	835.760	1 991	1 846,483	Vinegar factories	151,5' 0	59	270,162
Straw works	116,465	282	112 281	Wall paper factories	100,000	50	100,000
Sugar refineries	2,150,000	723	9,627,000	Wax candle and taper factories	5 073	27	15,140
Sugar & syrup making from sorghum, beet root, etc	145 900	215	[illegible]	Whip factories	14.434	72	53,404
Superphosphate w'ks	252.200	4'	90 500	Wig making	72,597	76	52,770
Surgical appliances	51.400	45	87,200	Window shade factories	68,045	53	59,450
Tailors and clothiers	5,719,729	18 029	15.102 993	Wire works	90,' 00	66	213,000
Tanneries	6,386 222	5,491	15.144,535	Wood turning	190,382	604	431,797
Tent and awning factories	15,000	36	44 000	Wool cloth making	5,272 876	6,877	8.113,055
				Grand Totals	165 302 633	254,935	309.676,068

COMPARATIVE SUMMARY.

The following is a comparative view, by Provinces, of Capital Invested, Value of Products, and number of Employees:

	Capital invested.		Value of Products.		Persons Employed.	
	1881.	1871.	1881.	1871.	1881.	1871.
	$	$	$	$	No.	No.
Prince Edward Island	2,' 85,776	.....	3,400 208	.....	5,767	...
Nova Scotia	10,183,060	6 ' 41 966	18,575 326	12.338,105	20.390	15,595
New Brunswick	8,425.282	5 976 176	18 512 658	17,367.087	19,922	18 35[illegible]
Quebec	50,216 992	28,071.868	104,602 258	77 205.182	85.673	66.71[illegible]
Ontario	80 950 847	37 874,010	157,980 870	114.706,790	118.308	87,28[illegible]
Manitoba	1,383 331	.. ....	3 413.026	.....	1,921	....
British Columbia	2,952,835	.. ..	2,926 784	....	2,871	.. ..
The Territories	104,500	.....	195.938	.....	83	....
Totals	165,302,623	77,964 020	309,676.068	221.617.773	254,935	187.91[illegible]

For a concise classification of the different branches of industry, the report of a Commission appointed by Parliament to enquire into the state of trade, and whose results were submitted this year to the House of Commons, has been taken as a basis, the official character of which makes it as far reliable as investigations of such a nature can be considered. This report comprises first, Ontario and Quebec, and secondly, the Maritime Provinces, and in the former it divides the factories into eighteen classes, viz.:

1. Foundries.
2. Furniture Factories.
3. Manufactures of Machinery.
4. Agricultural Implements.
5. Manufactures of Iron.
6. Tobacco and Cigars.
7. Knitting Factories.
8. Leather, Brushes, Brooms and Ropes.
9. Woollen Factories.
10. Manufactures of Wood.

11. Confectionery and Biscuits.
12. Boot and Shoe Factories.
13. Manufactures of metals.
14. Manufactures of Paper.
15. Musical Instrumente.
16. Clothing.
17. General Miscellaneous Industries.
18. Cotton factories.

1.—FOUNDRIES.

This class includes the manufacture of stoves, furnaces, ornamental iron work, sinks, pipes, hollow ware, car wheels, malleable iron work, carriages, saddlery, builders hardware, and all kinds of castings.

The average wages in 1878 were $386.36, and in 1884, $407.94. The production has increased in a greater ratio than the number of hands, showing that by means of better appliances and facilities brought into use, by reason of the larger trade to be done each man produces more now than six years ago. There is, in a few lines in this class, still some little foreign competition. This is attributed, in some instances to undervaluation, and in others to a very large surplus production in England and the United States; but on the whole there are very few complaints from manufacturers of this kind of goods, and the trade is in a fairly satisfactory condition.

Every large place in Canada will be found to possess a foundry—if not solely worked as such, attached at least to machinery or other iron works, where moulding is carried on at certain times. The increasing use of iron in building, as well as in all branches of manufacture, creates a demand for castings that requiressuch establishments at certain intervals at least, and of ready access.

2.—FURNITURE FACTORIES.

This class includes the manufacture of general lines of furniture, mattrasses and upholstering work. A commencement has been made in exporting articles of furniture, as well as in shipping work in an unfinished condition abroad, where it is finished and put together. By shipping in this way the bulk is better proportioned to the weight, and there is a prospect of a fairly remunerative business being done in this manner.

There is an increased production per hand in this business, owing to the improved plant and machinery used in the manufacture of articles of furniture.

Furniture manufactories on a small scale are abundant, and several very large factories, turning out enormous quantities of every article in this line, are established at various points.

3.—MANUFACTURES OF MACHINERY.

All descriptions of machinery are included in this class, such as, engines of all kinds, saw-mill, wood-working, flour-mill, hydraulic, iron-working, knitting, boot and shoe, sewing machines and boilers where the building of these is united with engine work. Where boilers alone are made, they are classed with manufactures of iron. In the general lines the trade may be said to be entirely in the hands of Canadian manufacturers, and an export trade, chiefly to South American companies, has commenced. There is a steadily increasing trade in sewing machines especially.

There is scarcely a city or large town in any part of the Dominion that does not possess machinery, engine, or boiler works, on a larger or smaller scale.

The manufacture of sewing machines has developed into extraordinary dimensions of late years, and it is now one of the important branches of industry of Ontario. The machines are shipped to all parts of the world. One firm engaged in this trade has its price catalogues printed in thirty-two different languages. The machines are brought to such admirable perfection that they can be used for sewing either the finest cambric or the heaviest leather.

4.—AGRICULTURAL IMPLEMENTS.

Under this head is included the manufacture of self-binders, reapers, mowers, horse rakes, seeders, harrows, plows, scrapers, rollers, cultivators, fanning mills, threshing machines and general harvesting machinery.

There are numerous manufactories for these articles, some of them on a very large scale, in various parts of the country. In a new country where labour is scarce, the use of machinery that will supply hand labour, becomes an imperative necessity and no country in the world can compete with this continent in the manufacture of implements to perform the work usually carried on in Europe by hand on the farm. American ingenuity, which long ago developed itself to a great extent in this branch of industry, has spread to Canada, and the Implements shown at the annual Provincial, County and Dominion Exhibitions, as well as those sent to Foreign International Exhibitions, show that Canada can rely upon her own manufactures, if the enterprise is only carried out on a large enough scale.

Owing to the largely increased demand, greater facilities for turning out work had to be provided, and in this way an unskilled man is now doing, with a machine, what a skilled mechanic formerly did by hand. The output during the last five years has increased over 106 per cent., or $157 per hand, showing conclusively that machine work must have largely replaced the hand-made work of former years. There is also a large increase in the capital invested in the same direction.

In the older Provinces, the market for these implements is monopolized by the home manufacturer, but in the North-West, in spite of the recent increase of duty, there is still some United States competition. This competition is accounted for in several ways. There is, first, the prejudice in favor of the superiority of United States made implements, as adapted to prairie farming, which still lingers in some minds, but is being gradually rooted out by reason of the exceedingly fine machines now being produced by Canadian makers, which may safely be compared for excellence of design, good workmanship and facilities for doing the work for which they are intended, with the production of any nation in the world. Then there is the question of freight rates, which in the past has militated against the Canadian and in favor of the Western States manufacturer. This cause, however, does not exist now, as, during the past season, freight rates to the North-West have been reduced very largely. One manufacturer, who in 1883, paid $300 per car to Manitoba, was able to obtain cars during the season of 1884 for $150. In consequence of this reduction he was enabled to sell his implements in the North-West 15 per cent. cheaper than the preceding year, as it is the custom to sell goods in that country at the same price as in Ontario, with freight added. But there is still another reason why the United States manufacturer is able to sell some implements, in the Canadian North-West, and it is a very unfair advantage which this reason gives him over his Canadian competitor. As is well known, the harvest season in the South-Western States commences at a much earlier date than in the more northern territories, and at the opening of the season in the south the United States implement maker has a stock of his goods on the ground for sale, and disposes of as many of them as possible at a regular price, a price which will enable him to make a fair profit on the article. Then, as the season advances north and west, he moves his unsold stock with it, disposing of as many as possible in each State and Territory, until, finally, in September, he finds himself in the North-West with what is left unsold of his implements. Having derived a good profit from his earlier sales, he is prepared to dispose of what remains, even at sacrifice prices, rather than take them back to the factory. Each year adds many improvements to the implements, and, as a consequence, machines made one year do not bring nearly as good a price the following season. In view of this fact, and also that the freight rate back to the works would be a considerable item, the market is flooded at this time of the year with machines for which almost any price offered would be taken.

With reference to the prices at which these implements have been sold, manufacturers generally concur in saying that during the past six years prices have been reduced from 15 to 25 per cent. Specific figures were given in some cases, a few of which may be noted. One manufacturer who formerly sold his make of reaper at $110 now sells at $80; another whose reaper was in 1878 sold at $98 now sells at $80,

his mowers, formerly $63, are now $50; drills, then $70 to $72 are now sold at $60; another who sold his reapers in 1878 at $105 now gets but $90; another now sells mowers at $60 for which, in 1878, he got $75; another sells his reapers at $80, who six years ago, sold the same description of machine at $120; another who used to obtain $525 for a threshing machine and horse-power, now sells at $475; another says he reduced the price of his binders 25 per cent this year; another, who, last year, sold binders at from $300 to $340, this year sells at from $275 to $300. Enough has been advanced to show the percentage of decrease which has taken place during the past six years.

In conclusion, it may be said that this class of manufacturers are in a fairly prosperous condition, and, taken as a whole, look forward hopefully to a remunerative season's business in 1885.

5.—MANUFACTURES OF IRON.

This class includes rolling mills, manufactures of nails, iron bridges, edge tools, iron pumps, hammers, machine knives, axes, files, saws, taps and dies, safes, scales, cutlery, springs, bolts and nuts, screws, garden and hand harvesting tools, boilers, &c.

Foreign competition in many of these lines is very keen.

The manufacture of axes, scythes and other necessary agricultural tools is rapidly increasing, and it is estimated that, with a fair amount of capital placed in the trade, double the amount now manufactured would find a ready sale. There are manufactories of saws and edge tools, axes, chisels, planes, augers, &c., in various places, and the main feature of success consists in properly perfecting the peculiar tempering of the steel required for this climate.

6.—TOBACCO AND CIGARS.

Complaints against the importation of cheap German and Mexican cigars are made by manufacturers, who contend that they are unable to compete against the low priced labour of those countries. Cigars which cost 40 cents to $1.25 per 1,000 for labour in Germany, would cost from $2 to $4.75 in Canada. If the tariff were high enough to enable these low grades to be made in this country, a considerable quantity of the tobacco grown in Quebec could be used in their manufacture. No injustice, it is said, would be done to the consumer, as the men who use this grade of cigar usually buy them singly, and in nearly every case pay five cents for each cigar. The home manufacturer is prepared to make, and does now make, a better cigar than the foreign one to be sold at this price, but as the retailer's profit is not so large the foreign goods are pushed, to the detriment of those made at home.

Tobacco, an essential article of consumption, especially among the working classes, is cultivated by almost every small agriculturist in the Lower Provinces, and in Quebec, for his domestic use, but in Ontario it is more usually purchased than grown.

Of late years tobacco factories have gone into operation in the leading cities, and as it is the inevitable tendency of all large and well organized establishments to absorb the smaller and weaker ones, such has been the case in this branch of industry, productive, probably, of more safety to the Government in the collection of its revenue on this article.

The following table, taken from the Report of the Minister of Inland Revenue, exhibits a comparison of five years in respect of tobacco (including snuff and cigar. ttes):

Fiscal Year.	In Warehouse 1st July.	Manufactured during the Year.	Taken for Consumption.	Exported.	Otherwise accounted for.	In Warehouse 30th June.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1879-80.....	2,016,734	8,085,780	7,247,682	256,674	12,958	2,585,200
1880-81.....	2,585,200	8,112,872	8,100,003	343,776	37,153	2,217,140
1881-82.....	2,217,140	9,271,254	8,376,972	388,438	5,598	2,717,386
1882-83.....	2,717,386	8,574,394	8,965,001	453,471	10,416	1,862,892
	9,536,460	34,044,300	32,689,658	1,442,359	66,125	9,382,618
Annual average for 4 years ending 30th June 1883	2,384,115	8,511,075	8,172,415	360,585	16,531	2,345,655
1883-84.	1,863,862	10,940,469	10,072,681	418,574	74,272	2,237,834

The following is a statement of Canadian Tobacco taken for use during the last five years:

Fiscal Year.	Leaf and twist paid duty.	Taken for use in Manufactories.	Total.
	lbs.	lbs.	lbs.
1879-80.....	43,744	17,392	61,136
1880-81.....	378,416	19,061	397,477
1881-82.....	454,884	37,518	492,402
1882-83.....	178,432	198,765	377,197
1883-84.....	232,923	93,881	326,804

7.--KNITTING FACTORIES.

Before the change in the fiscal policy in 1878, these goods were largely imported from Great Britain, but advantage was soon taken of the opportunity given to make these articles in Canada, and a wonderful increase in the output here was the immediate result. The importations were soon stopped, and it took but a short time to ascertain that the production had gone beyond the consuming power of the people. The usual result followed, prices were cut down to below a paying figure, and the output was curtailed to a considerable extent. Had it not been for the market which, fortunately at that time, was opened in the North-West, the result must have been a much more serious one for those engaged in this branch of manufacture. But largely owing to this cause the crisis which seemed imminent was averted and, considering the difficulties in which the trade found itself, the number who failed to weather the storm was exceedingly small. Although not yet in a thoroughly healthy condition, the prospects are beginning to brighten, some few lines not hitherto made in Canada are being started, and with careful management at this juncture a better state of affairs will undoubtedly soon be reached. In England, it is stated, over production in this class of goods has taken place to fully as great an extent as has been the case in Canada, and in consequence a small quantity of the higher priced goods from there are finding their way into this market even at the present low prices.

In hosiery, at least one-third of the production of Canada is made by housewives on the old-fashioned spinning wheel and by hand knitting, as in the Province of Quebec, or upon family knitting machines, as in Ontario.

8.—LEATHER, BRUSHES, BROOMS AND ROPES.

This class includes leather belting, trunks, buggy and carriage tops, card clothing and leather, brushes, brooms and ropes.

Brush making has increased very largely, and all but the fine lines of toilet goods are now made in Canada. Tanneries have also grown to some extent, owing to the increased output of boots and shoes, and in some cases in this trade a slight export to the United States has commenced.

Rope making also shows a very satisfactory increase, and goods are being shipped in considerable quantities to some of the countries of South America.

9.—WOOLLEN FACTORIES.

Previous to 1879 there was a very large importation of these goods from abroad, and competition is still felt to a limited extent, but experience is rapidly enabling Canadian manufacturers to compete successfully with foreign goods. The trade is on a whole in a satisfactory condition.

As regards the manufacturing of Woollens in the Dominion, the following figures appear in the census of 1881:

	Number.	Capital.	Employees.	Production.
Carding and Fulling Mills	439	$580,417	901	$1,498,343
Hosiery Manufactories	83	630,821	1,556	1,385,730
Woollen Cloth Making	1,281	5,272,376	6,877	8,113,055

Quite a large number of the concerns mentioned in this summary are of the very smallest kind, and unfortunately afford no intelligible indication of the business value of the statements.

The following is a summary of detailed information specially furnished relating to ten in 1879, and eleven in 1883, of the larger Woollen Factories included in the foregoing enumerations:

		1879.	1883.
Capital Employed		$1,644,000	$2,388,000
Sets of Cards in use	No.	60	72
Wool used per annum	lbs.	3,212,000	4,079,250
Quantity of Cloth produced	yds.	1,995,000	2,593,500
Blankets	pairs.	30,000	39,000
Value of one year's production		$1,571,300	$2,042,740
Chemicals and Dyes		$160,000	$210,000
Number of Looms		345	391
Employees		1,306	1,697
Aggregate Wages per annum		$297,400	$386,600

Goods manufactured:—Tweeds, Cassimeres, Etoffes, Flannels, Blankets, Serges, Beaver, Presidents, Diagonal and Nap Coatings, Shoe Cloth.

[NOTE.—The number of Looms in 1879 included 102 broad and 243 narrow; in 1883 the numbers were 122 broad and 269 narrow.]

The textile industry of Canada has been the growth of the last half century. As early as 1830 there were two or three woollen mills, doing a considerable provincial trade in Ontario, and several in Quebec, while there was a good deal of homespun and home-woven cloth made up among the rural population. For the past 25 years power looms and improved machinery have been in use on coarse woollen cloths, to a fair extent, in all the older provinces of the Dominion, and home production had made these advances when imported goods came in free or only at a nominal duty.

It is only since confederation that the stimulus of protection has been applied to this and kindred trades, and during the last ten years home production has about doubled, till there are now in round numbers, 450 carding and fulling mills, 90 hosiery factories, and 1,300 tweed and other woolen cloth mills, employing a total of 10,000 hands, and producing goods to the value of about $11,000,000. These figures do not include a large production that regularly goes on in hosiery and similar goods

made upon family machines, whose cheapness and increased use is now a serious menace to the existence of the small hosiery establishments.

Canadians have great respect for strength and durability in cloth, and here the home manufacturer has the moral advantage. Very little shoddy is made in this country and in coarse hosiery and tweeds Canadian goods will give twice the service of any imported goods; in the medium and better grades, of which very good samples are now produced here, the only serious defect is in the dyeing, and not in the fabric.

10.—MANUFACTURES OF WOOD.

This class includes waggons, baby and toy carriages, carriage woodwork, carriages, cars, show cases, picture frames, spools, bobbins, snaths and lasts, barrels, matches, washing machines, &c.

One firm was met with in this class who manufactured snaths, and who, previous to 1879, were located in Vermont, from which state they shipped their goods into Canada. After the change was made in the tariff they removed their works to Canada, and are now supplying the trade at prices 33⅓ per cent. lower than when their goods were sent in from the United States.

A firm included in this class has recently commenced the manufacture of canoes, and are making such a beautifully finished article that they are in demand in England and the United States, to which countries quite a number have been exported.

A trade which at one time promised to attain considerable proportions, was the export of buggies and carriages to Australia, but, owing to the very heavy freight rates, it has dwindled away to comparative insignificance.

The business of making toy horses and wagons is also a promising one, and the few engaged have every prospect of doing a profitable business, as the consumption in Canada has reached considerable proportions. Private car works, which are included in this class, are very dull as compared with two years ago. The reason given is that railway companies are now doing a much larger proportion of this work in their own workshops.

For barrels, formerly, almost every miller had a cooperage connected with his establishment, which provided all his wants, but the rapid extension of oil refineries has of late years demanded a larger supply of barrels than could be furnished alone by manual labour. As barrels in which it it is intended to export petroleum, provisions or flour should be the best which can be furnished, an impetus has been given to making them by machinery, and numerous barrel factories now exist. Not long ago one firm doing a large business, having exhausted all the timber suitable in the vicinity of their works, moved their mills to a further point, where the forest would afford them plenty of material for years to come.

Under this heading, it will be of interest to state that the exports of the manufactures from wood during 1884, amonnted to $1,438,615.

Washing machines have become so popular in the household as a means of domestic labour saving, that a very large trade in them is carried on. It is stated that no other machine except the sewing machine has ever been invented which so much relieves the labour of the household as the clothes wringer.

11.—CONFECTIONERY AND BISCUITS.

No foreign competition of any moment is experienced by this class of industries, and the trade is virtually controlled by Canadian manufacturers.

The business in these branches is almost universal, but several large establishments in cities monopolize much of the trade.

Twenty-five years ago almost all the biscuits consumed were made in the United States. One firm in Toronto alone now use about 250 barrels of flour a week for this purpose.

12.—BOOT AND SHOE FACTORIES.

The history of the boot and shoe manufacturing industry in Canada is an inter-

esting one. Previous to 1859, the trade was supplied by United States manufacturers. In that year the duty was raised from 12½ per cent to 25 per cent. This measure of protection wonderfully stimulated the growth of the manufacture in Canada, and from that time on the progress has been steady. Each year has witnessed a larger output than its predecessor, in the medium and coarse grades of work. The trade in the finer lines was still done by United States dealers, and it has only been during the past two or three years that any considerable quantity of these lines have been produced in Canada. Now the gross importations are an inconsiderable portion of the consumption, and were it not for the fact that prices were cut, to Canadian dealers, much below the regular price on the other side of the boundary line, would be cut off altogether. With the increase of growth, prices have diminished. By 1860 the prices of staple lines had fallen to lower figures than those which prevailed when the goods were imported, and to-day Canada is said to be the cheapest market in the world for medium and coarse grades of boots and shoes. Our manufacturers are building up a large export trade; the products of Canadian factories now find their way into Newfoundland, South America, Great Britain and the West Indies.

Another feature of the trade is, that makers who formerly turned out from their works all classes of goods, from the finer ladies' to the coarse stoga, are now confining their attention to one particular line, and buy from other manufacturers other lines which their customers may order. In this way the maximum in quality at the minimum of cost is reached; and there can be no doubt but that, in the hands of the energetic, enterprising business men who now control this trade, the boot and shoe industries of Canada have a prosperous career before them.

Great quantities of this stock are now made by machinery, and the system is revolutionizing the old channels of trade, as a boot can be stitched, fitted and pegged by machinery, all in the space of two minutes. Montreal seems to have become the centre of this branch of industry, and is to the Dominion what Lynn is to the United States.

The manufacture of felt boots, which has been commenced since 1878, has grown very rapidly.

13.—MANUFACTURES OF METALS.

This class comprises the manufacture of wire goods, chandeliers silver-plated ware, pins, spring beds, brass work, lanterns, pressed and stamped tinware, bird cages, watch cases, lightning rods, rivets and type.

In the manufacture of stamped tinware, considerable progress has been made during the past six years; deep-stamped ware, which has been added in that time, supplies a considerable portion of the production and employs quite a number of the hands. Spice packages, which were formerly imported, filled, are now being made in Canada. A New York firm, who are engaged in putting up sardines in New Brunswick, and who, previous to the change in the tariff, imported the decorated tin plates used in making the boxes, from the United States, now purchase these plates in Canada.

14.—MANUFACTURES OF PAPER.

This class includes paper and pulp mills, the manufacture of paper bags and boxes, and wall paper.

In the manufacture of paper the foreign competition now felt is from Great Britain and Germany, while in wall paper and paper boxes it is from the United States. The manufacturers of wall paper, particularly, complain of the unfair competition which they have to fight. Papers which are sold in the United States at 14c. have been jobbed off in Canada at 5½c. in order to close out lines. The patterns are changed each year, and it is therefore necessary to have as little stock as possible carried over from one season to another. If the remnants of the season's make were sold at low prices in the United States market, it would have an injurious effect on the prices the following season, so in order to keep up prices there, the goods are brought into Canada, and sold in many instances for just what dealers are prepared to offer. This industry has grown considerably during the past few years, and the papers now being produced in Canada are so tasteful in design and

beautiful in colors that many of the patterns might almost be styled works of art.

Printing and wrapping paper is manufactured on a large scale, but the number of mills for this work is very limited, and the business is in the hands of a few firms. There is ample room for the ertablishment of additional paper mills to those now in existence.

The manufacture of paper from wood pulp has of late years acquired great importance, and is rapidly increasing, as the supply of rags on which paper makers formerly depended for their work is inadequate to the demand for the manufactured material. Were it not for this factor in paper making, paper would now be one-half as much more, if not double, the price it is to-day. Considerable wood pulp in sheets is dried on cylinders as it leaves the pulp machine, when it is used as a substitute for cardboard for making paper boxes and bandboxes, without any other ad mixture. The paper maker mixes wood and rag pulp in a proportion of forty to sixty per cent. of the former, according to the standard and quality of paper required. A large number of mills are employed in the wood pulp manufacturing business exclusively.

15.—MUSICAL INSTRUMENTS.

This trade received great impetus from the increase made in the duties in 1879, and has continued to grow and prosper up to the present date. No other industry better deserves success. The men who were the pioneers of the trade in Canada struggled bravely to overcome the disadvantageous position in which they were placed. They invested their money and spent the best years of their life in an endeavor to promote the growth of this branch of manufacture, meeting with but indifferent and almost disheartening results. Now, owing to the fiscal policy prevailing, they are reaping to some extent, the benefit which they so earnestly, but ineffectually, strove to obtain before 1879.

The industry is one which largely benefits the country, as it employs very few hands who are not skilled mechanics, and mechanics who receive the highest average rate of wages of any class of operatives in the Dominion. If the Government had no other result to point to, as an effect of the change of tariff, than that achieved in this industry, it would in itself be a lasting monument to the wisdom and foresight of the people in Canada in approving, and the ministry in adopting the policy of encouraging native manufactures.

16.—MANUFACTURES OF CLOTHING.

This class is an extensive one and includes the manufacture of wollen and cot ton clothing, silk, felt, cloth and straw hats and caps, corsets, suspenders, gloves and mitts, shirts, collars, cuffs, &c.

The woollen clothing used in Canada was largely imported from Great Britain up to 1879, and ever since that date the importations have continued to some extent in the lower grades of goods, but Canadian manufacturers are rapidly occupying the ground.

In gloves and mitts there is some European competition still felt.

In furs, all the finer goods are now made in Canada, but in the lower priced goods there is some competition from the poorly paid labour countries of Europe.

Some shirts and collars are still imported from the United States, it is said considerably below their true value.

There is ample room for the investment of capital in almost all, if not even in every branch of this industry.

17.—MISCELLANEOUS INDUSTRIES.

This class necessarily includes a wide range of manufactures, the principal ones being, sugar refining, silk, clocks, whips, wringers, emery wheels, gunpowder, buttons, preserved fruits, paints and varnishes, glass and pottery, mattrasses. oil cloth, window shades, cork cutting, rubber clothing, jute, spices, soap, candles, paints, &c.

Amongst the most important of the industries in this class is the manufacture of silk. The one factory engaged in this industry has trebled its capacity since 1879,

and is now doing the great bulk of the Canadian trade in the lines which they manufacture, viz., threads and ribbons. One factory was started a few years ago for the manufacture of piece goods, but unfortunately the venture did not prove a success. It is expected, however, that another attempt in this direction will be made in a very short time, and, it is hoped, with more satisfactory results.

The button factories are turning their attention to exports, and one firm in this line succeeded in disposing of $12,000 worth of their goods in the United States during the first six months of 1884.

Several establishments have been in operation for the manufacture of glass and glassware, such as lamp chimneys, goblets and phials. The chief difficulty encountered is the want of the proper description of sand. There appears to be ample room for the manufacture of this article, owing to the great and ever-increasing demand.

Pottery is made in various places where the proper clay exists.

There is a very large sugar refinery in Montreal, doing an extensive business, with a very large capital involved. All the modern appliances are in use there, and the best of workmen with high grade acquirements of chemistry and manufacture, are employed. The sugar refining interest will be found treated of below under that heading in the report of the Maritime Provinces.

Brickmaking by machinery is largely carried on, especially in Ontario, the locality being determined by the presence of clay especially adapted for the purpose. Pressed brick commands a high price, and is in great demand.

18.—COTTON FACTORIES.

The cotton trade of Canada is of recent date, the first mill being established about fourteen years ago, and the total annual production in 1873 was under 10,000,000 yards. The population was then about 3,750,000, and the total consumption per head was 30 yards per year. In other words, about 27 yards of imported cotton were then consumed here, to three yards of home manufacture. Now there are 22 cotton mills, with a total capacity of 531,000 spindles, capable of producing about 135,000,000 yards per annum. With a present population of 4,500,000, we have about 35 yards per head a year, produced out of a total consumption of some 40 yards per head. These were the figures of 1883-4, which, however, showed an apparent consumption higher than the normal rate, which has been one of regular increase in the quantity per head.

It is a fact worth notice that there is at present not a single mill in Canada which uses sizing, except in the starching processes, which are a necessary part of the manufacture of bleached goods, and even here very little is used in comparison with English factories.

It appears that there were 19 Cotton Factories in the Dominion at the time of census-taking—the capital invested amounting to $3,476,500 with 3,527 hands employed, and the value of productions being $3,759,412. The following statements regarding Cotton Factories are collated from reliable information for 1883—the gross Capital invested amounting to $8,850,000, and the estimated product of the single item Cloth being equal to about 115,000,000 yards. The other lines of production during 1883, were: Brown Sheetings and Shirtings, Bleached and Fancy Shirtings, Apron Checks, Nun's Stripes, Denims, Ticks, Ducks, Cottonades, Crochet and Knittings, Beam Warps for Woolen Mills, 8-4, 9-4 and 10-4 Brown Sheetings, Drills, Bags, Wadding and Batting, Cheviots, Canton Flannels, Shoe Ducks and Drills, Pocketings, Wigans, &c. The computed value of *total* production of the mills in the following table, is $10,400,000 for the year.

Name of Factory.	Location.	Number of Looms.	Number of Spindles.	Tons of Coal used.
Canada	Cornwall, Ont	1,000	45,000	6,000
Stormont	Cornwall, Ont	550	26,000	2,500
Kingston	Kingston, Ont	300	14,000	3,000
Dundas	Dundas, Ont	450	20,500	4,000
Hamilton	Hamilton, Ont	250	12,000	2,500
Ontario	Hamilton, Ont	250	11,500	2,500
Lybster	Merriton, Ont	300	14,000	1,500
Thorold	Thorold, Ont	300	14,000	1,000
Craven	Brantford, Ont	300	14,000	1,000
V. Hudon	Hochelaga, Que	1,400	65,000	12,000
St. Anne	Hochelaga, Que	480	21,600	4,000
Merchants	St. Henri, Que	550	24,750	5,000
Valleyfield	Valleyfield, Que	1,400	60,000	3,000
Chambly	Chambly, Que	150	6,750	500
Coaticook	Coaticook, Que	250	10,000	1,000
St. Croix	St. Stephen, N. B	750	34,000	3,000
St. John	St. John, N. B	400	18,000	5,000
Wm. Parks & Son	St. John, N. B	150	6,750	3,000
Nova Scotia	Halifax, N. S	500	22,500	5,000
Moncton	Moncton, N. B	200	10,000	2,000
Windsor	Windsor, N. S	250	12,000	2,500

Bleaching and calico printing on a very considerable scale have been introduced by some of the cotton companies.

MARITIME PROVINCES.

The following extracts are taken from the Report of the Commissioner appointed by Parliament to secure information relative to the Industries of the Maritime Provinces, and from other official sources:

THE IRON AND STEEL INDUSTRY.

The promoters of the iron and steel business have nothing in the way of complaint to make; nor is there much grumbling aside from that to which "hard times" and trade depression gives rise. In some instances, notwithstanding the disadvantage of dull times all over, a good trade is being prosecuted. The steel works and the iron works of New Glasgow, the Starr Manufacturing Co.'s Works, of Dartmouth, the Londonderry Iron Works, the several foundries throughout the Maritime Provinces, the Iron Knee Works of Messrs. James Harris & Co., and of Messrs J. A. & W. Chesley, of Portland, and other prominent establishments, not only profess to be doing a fair business, but they display proof that there is something tangible in the claim. Of course, they would do a larger trade and a better business if the general trade of the country was not passing through one of those crises which seem to be of periodic occurrence. In some instances, peculiar circumstances aside from general depression, affect certain branches of the trade. In ship's work there is an undoubted drop so f r as St. John, Portland and Quaco, N. B., are concerned, the revolution in the shipping interest caused by the introduction of cheap iron steamers and

cheap iron ships, having paralyzed the building of wooden ships—an industry in which for many long years, St. John stood proudly pre-eminent. But, of course, other industries will take the place of the declining one, other avenues of trade will be opened up, and in time the blank will be filled, and the discouragements of to-day forgotten altogether or remembered only as a regretful reminiscence.

The Londonderry (Nova Scotia) Iron Works.—The first operations of the Londonderry Iron Works were started in 1840, although on a very limited scale, and active work was really not fairly commenced until 1852. The Steel Company of Canada was organized in 1874, and the operations of the concern under the new arrangement have gradually increased. The first three years were employed in experimenting and developing the ore mines and erecting the plant now in operation, which was seriously started in 1877. The general manager, on the 19th November last, said:—"At that time (1877) about 400 hands were employed. In 1878 somewhat over 500 hands were used, at an average wage of $1.10 per day. Since then the number of hands employed has reached 850, and the wages, until very recently, say 1st September, averaged $1.50 per day; now it is about $1.20. Owing to the slackness of trade the number of men employed is reduced to about 625. The yearly product of the works may be stated at about 16,000 to 18,000 tons of pig iron per annum, as at present running, and 600 tons of bar iron. The capital expenditure at at the works is about £300,000 stg.

THE CORDAGE, ROPE AND TWINE INDUSTRY.

This business is enjoying a comfortable time. There are not many factories in the Dominion, but still the number is considered sufficiently large for the work required. A large amount of money is invested in this enterprise, and a great deal of capital is needed to carry it along. Those engaged in the industry are free to declare that the tariff is a great help.

THE CLOTHING INDUSTRY.

The clothing trade is affected injuriously by the general depression, and to a very considerable extent. The purchasing power of their usual markets is curtailed, and Ontario and Quebec dealers are forced to throw upon a tardy market competitive goods at low prices. With a renewal of prosperous times this condition of unpleasantness is expected to pass away. The opening up and continued development of the far west will present new fields for the clothing factories, an improved condition of the home trade will enlarge the purchasing power of the people, and competition will not be forced down to the ruinously keen level. For this trade, as well as others, a fair future is evidently in store.

THE WOOD-WORKING INDUSTRY.

There is more activity displayed in the wood-working business than one would expect to find. The truth is that this industry is making more effort to secure fields for the product of the factories, than almost any other. Those interested in the door, sash and blind factories are covering the home market well, because the National Policy enables them to do so: and then, success at home is enabling them to put forth vigorous efforts to compete for the trade of outside territory.

Mr. Cornwall, a reliable authority in trade matters, speaking of wood industries in the Province of New Brunswick, and the scope they offer for investment, stated in public last year as follows:

"Chief among the articles that can be manufactured here with profit are packing boxes of all sizes, our woods being really better suited for this work than those found on the continent. Salt and fish boxes are also required in endless quantity. Window sashes, casings, doors and door casings of the better class of woods can be sent to England at a good profit, though it is doubtful if it would pay to compete with the United States in slop work of the cheaper woods.

"Laundry and kitchen tables and patent folding tables are in demand; also cloth boards, pastry boards, rolling pins, potato mashers, wooden bowls of all kinds, clothes horses, wringers, towel rollers, ice cream freezers, knife and fork

boards and boxes, wash boards (a very large item), pails, tubs, churns, and handles for brooms, mops, hoes, rakes, hammers, hatchets and edge tools generally.

"There is a large demand for common wood bedsteads, much of the supply of which article is now received from Boston. Whole chairs and furniture in parts, hat and clothes and wall racks, step ladders, folding and step ladders, bench screws, bobbins and spools, are standard articles in unlimited request. There is a limited demand for shoe pegs. Toy or miniature washtubs, pails, chamber sets, wagons, wheelbarrows, log cabins, bureaus, sand mills and fancy boxes, with some taking novelties, form a special line that could be sent to England with profit to all concerned.

"House fittings and furniture made according to the architect's plans, open up a line for the higher class of wood work, which could be operated by a competent agent on the spot, supplied with sample woods, &c., who could negotiate directly with the architects. Indeed, the present is a most favourable opportunity for initiating this industry, as mahogany and dark woods generally, are now considered bad form in England, the lighter woods taking their place. A factory could here find a field for the manufacture of immense quantities of the better class of flooring, borders and base boards, wainscotting, window cases, sashes, doors, carved mantels, &c., the furniture of the house to correspond with its wood work, from designs by the architect. * * * * * * * * *

"Special attention must be paid to the manufacture of spools and bobbins. The very best seasoned wood must be used and the articles made to an exact guage. As silk, &c., is reeled, not measured, the necessity for accuracy in the size of the spool is obvious. There is a tremendous demand in England just now for Venetian blinds; while ship's furniture presents another line in which very much can be done."

Mr. Flewelling, a reliable New Brunswick manufacturer, also speaking of the vastness of the field for a foreign market of woodenware, says: "Properly worked this business is large enough to keep every mill in New Brunswick, and many more, running full time to supply the orders that would come to hand."

THE LUMBER INDUSTRY.

Upon the lumber trade, as upon many other industries, invention and time are working wondrous changes. Those engaged in lumber are discovering that, as in the case of cotton, too much attention must not be given to the production of one line of goods. Diversity in manufacturing and diversity in markets are the wants of the times, and he who would best promote these ends would best help to revive the drooping spirits of the energetic class that hitherto has been dependent upon lumber and the work to which it gives rise for sustenance. In time, judging by present indications, some at least of our lumber operators will be engaged in the preparation of other classes of wood goods than spruce deals, and will give to other woods than spruce a prominent place in their field of operations. Spruce being a plentiful wood and easily manufactured, as compared with other woods, cannot well be superseded; but the form of its product can and will be diversified. With a revival of prosperity in general business the price of lumber will improve. This is the belief of many in the lumber sections of the Maritime Provinces. The competition of iron steamers and iron ships with wooden craft in the carrying trade of the world, revolutionized the shipbuilding interest and destroyed the magnificent business which had made for many citizens of this place comfortable competencies, if not colossal fortunes. The demand for vessels of large tonnage is no longer what it once was, and the shipyards do not now resound with the busy hum of industrial life. An occasional ship finds her way from the blocks in one or another of the almost silent shipyards to supply some special trade requirement of the builder or his friends rather than to find an eager purchaser. The prostration of this trade in wooden ships—how important can best be appreciated by those engaged in shipping ventures—had naturally a detrimental effect upon the prosperity and progress of the peoples of the two cities. Commercial policies could not bring back the lost trade. Towards the wooden ship trade, tariffs in this Dominion have always been considerate, but especially so in the industry's declining period; and its prostration is not,

therefore, chargeable against the policy framed to bring into life vigorous and healthy and profitable substitutes.

THE LOBSTER CANNERIES.

The lobster-canning industry is one of the most important in Prince Edward Island. There are upwards of eighty canneries scattered at various advantageous points along the island shores. Each cannery costs from $2,000 to $3,000, according to size and capacity, and the annual output amounts from $7,000 to $9,000. The canneries are kept running about four months every year, and give employment to a large number of persons—some 14 fishermen, 10 men who are not fishing experts, and 15 females. All hands receive good wages, the fishermen especially.

The price obtained for canned lobsters in 1884 indicates quite an advance. A Mr. Crue, extensively engaged in the business, informed the writer that he had been notified by his English agent in October last, that 28s. 6 d. per case—the highest price yet quoted, and a large advance upon the ruling figure last year, had been obtained for his shipment. Mr. Duvar, Fishery Inspector of Prince Edward Island, in a report on the island fisheries, places the value of canned lobsters for 1883 at $435,605. This year, it is clearly evident, both from the extent of the catch and the prices prevailing in the chief lobster markets, that a sum far in advance of last year, and ahead of the year preceding, and considerably in excess of half a million dollars, will be realized from the lobster fisneries through the canneries.

With the exception of those at Canso Cove, Murray Harbor, Cascumpec, Little Sands and Donnelly, the canneries have all been put in operation since 1878. In 1879 the number all over the island was limited to 35, and this year the number is *more than* 80.

STARCH FACTORIES.

The starch industry of Prince Edward Island has been prosecuted quite vigorously, but a slight check occurred last year. A temporary check to the industry would, it was thought by experienced business men, result in real benefit to the trade, as it would tend to the exercise of greater care in production, and would lead to a diligent search for profitable customers in quarters hitherto untried. The National policy is entitled to the credit of having given a stimulus to the starch industry.

The causes for the check were: First, the depression in the cotton trade in England and Canada; secondly, Germany and Holland, both of which countries are rivals of the island in the English market, have yielded an immense potato crop; and thirdly, the Western States have produced a heavy crop of corn. These three causes—powerful they unquestionably are—contributed in no inconsiderable degree to lower the price of starch in the island market, and to depress the industry.

Mr. McKinnon, a large manufacturer, says:

"There is a market for at least 1,000 tons of starch in Canada per year. The balance goes forward to England and to the United States. I am not aware that any has been sold at an actual loss. Starch is an article that age will improve rather than injure. Holding over will, therefore, only result in temporary inconvenience to the producer, and of course, the loss of interest on the value thus locked up."

SUGAR INDUSTRY.

There are four well equipped sugar refineries in the Maritime Provinces—one in Moncton, N. B., one in Dartmouth, N. S., one within the limits of Halifax city, and one outside of the city limits, on the western bank of the north-west arm. The latter refinery is smaller in size and capacity than the others. All four establishments were in operation when visited, even though at the time refined sugars were ruling lower in price than for many previous years. The managers of the respective establishments did not appear to be at all despondent at the condition of the trade. They indulged a cheerful, hopeful spirit, seemingly confident that the troubles which had arisen under a new order of things were not insurmountable. The low prices of sugars during a greater part of the year are said to be due to the steady depression

in the sugar markets of the world; and this deperssion is attributable to a variety of causes, included in which is the enlarged sugar production on the continent of Europe and the Government bounty system prevailing in Germany. Refiners have for some time been unfavourably affected by this state of things, but they are doubtless comforted by the prospect of an early change for the better. The production of sugars, the world.over, is to-day largely in excess of any former time; but it is equally true that the consumption of sugars has largly increased during the past few years, rising, in England, from 15 lbs. per head, in 1840, to 66 lbs. per head in 1880, and still higher in later years, and the fair presumption is, that consumption will continue to increase. In the production of beet sugar, it is stated, on the authority of one who claims to have fully investigated the subject, that the refining process has reached a point which will admit of no improvement; while in the case of the bulk of cane sugars, that high standard of excellence has not been reached. If this be so, there is room for a further exercise of skill and care in cane sugar production, the effect of which, coupled with the fact that cane sugar is produced at less cost than beet sugar, ought to tell measurably in the interest of those who prosecute the former industry, and that, too, without detriment to consumers.

———o———

The following list of articles now made in Canada, which were not made here in 1878, will show the industrial development: Iron bridge building, sugar refining, cotton printing, rice-hulling, and the manufacture of cutlery, emery wheels, pins, clocks, haircloth, enamelled oilcloths, jute, felt goods, organ reeds, writing papers, silver tableware, organ and piano keyboards, Britannia metal work, cashmere and other dress goods, glucose, steel, and many lines of textiles in both cotton and wool.

Another indication in a very marked form is the fact that while in 1881 not less than 85 per cent of the railway supplies of all kinds needed by the Canadian Pacific Railway were bought in the United States, in 1884, owing to the establishment of manufactures the Company did not buy more than 7 or 8 per cent. outside of Canada. Four-fifths of the rolling stock, not including the sleeping cars, are now manufactured in Canada, and very soon the manufacture of the latter will be undertaken here.

In conclusion, upon Canada's business men and the promoters of Canada's industrial enterprises devolves the responsility of developing with good judgment and utilizing with prudence, advantages placed within their reach. Canada requires that special industries should be pushed with caution, so that the producing capacity of the country be not extended beyond the ability to distribute; but Canada's manufacturers have it within their power to check excessive production and prevent the depressing consequences which result from it. Canada requires greater diversity in industrial pursuits; but Canada's business men and capitalists can exercise influence in a direction that will enable this need to be largely met. Canada requires excellence in the quality of its manufactures and moderation in cost, at least such moderation as will make competition with foreign products absolutely a success; but Canada's manufacturers are in a position to meet the requirements and gain the resulting reward, or to discard them and suffer disastrous consequences.

CENSUS ABSTRACT.

CENSUS OF CANADA--1871 AND 1881 COMPARED.

PROVINCES.	Area in Sq. Miles	Persons. 1871.	Persons. 1881.	Increase.		1871.		1881.	
				Numerical.	Per ct.	Males.	Females.	Males.	Females.
Prince Edward Island	2,133	94,021	108,891	14,870	15.8	47,121	46,900	54,729	54,162
Nova Scotia	20,907	387,800	440,572	52,772	13.6	193,792	194,008	220,558	220,034
New Brunswick	27,174	285,594	321,233	35,639	12.5	145,888	139,706	164,119	157,114
Quebec	188,688	1,191,516	1,359,027	167,511	14.0	596,041	595,475	678,175	680,852
Ontario	101,733	1,620,851	1,923,228	302,377	18.6	828,590	792,261	976,470	946,758
Manitoba	123,200	18,995	65,954	46,959	247.2	9,750	9,245	37,207	28,747
British Columbia	341,305	36,247	49,459	13,212	36.4	20,532	15,715	29,503	19,956
The Territories	2,665,252	52,000	56,446	4,446	8.5			28,113	28,333
Total	3,470,392	3,687,024	4,324,810	637,786	17.3			2,188,854	2,135,956

PROPORTIONS.

PROVINCES.	Proportion Per Cent. to each Province.		Persons to Sq. Mile.	Acres to a Person.	Acres of unoccupied land to a Person.	Increase—Males and Females.				
	Acres.	Persons.				Numerical.	Per Ct.	Numerical.	Per Ct.	Females to 100 Males.
Prince Edward Island	.06	2.51	51.0	12.5	2.2	7,608	16.1	7,262	15.4	98.9
Nova Scotia	.60	10.18	21.0	30.3	18.1	26,746	13.8	26,026	13.4	99.7
New Brunswick	.78	7.42	11.8	54.1	42.2	18,231	12.5	17,408	12.4	95.7
Quebec	5.44	31.42	7.2	88.8	79.5	82,134	13.7	85,377	14.3	100.4
Ontario	2.93	44.47	18.9	33.8	23.8	147,880	17.8	154,497	19.5	96.9
Manitoba	3.55	1.52	.53	1,195.5	1,159.3	27,457	281.6	19,502	210.9	77.2
British Columbia	9.83	1.14	.14	4,456.9	4,409.5	8,971	43.7	4,241	26.9	66.6
The Territories	76.80	1.30	.02	30,219.3	30,213.7	.....	.....	.....	.....	100.7
Total	99.99	99.96	1.24	513.5	503.0					

The areas of the great waters, such as the great lakes of the Upper Provinces and the bays and arms of the seas in the Maritime Provinces, may be estimated at 140,000 square miles.

CENSUS OF 1881.

RELIGIONS OF THE PEOPLE.

PROVINCES.	Baptists.	Catholics, Roman.	Church of England	Congregational.	Disciples.	Lutherans.	Methodists.	Presbyterians.	No Religion.	Other Denominations.
Prince Edward Island	6,236	47,115	7,192	20	594	4	13,485	33,835	14	396
Nova Scotia	83,761	117,487	60,255	3,506	1,826	5,639	50,811	112,488	121	4,678
New Brunswick	81,092	109,091	46,768	1,372	1,476	324	34,514	42,888	114	3,594
Quebec	8,853	1,170,718	68,797	5,244	121	1,003	39,221	50,287	432	14,351
Ontario	106,680	320,839	366,539	16,340	16,051	37,901	591,503	417,749	1,756	47,870
Manitoba	9,449	12,246	14,297	343	102	984	9,470	14,292	16	4,755
British Columbia	434	10,043	7,804	75	23	491	3,516	4,095	180	22,798
The Territories	20	4,443	3,166	.....	.....	4	461	531	1	47,820
Totals	296,525	1,791,982	574,818	26,900	20,193	46,350	742,981	676,165	2,634	146,262

ORIGINS OF THE PEOPLE.

PROVINCES.	African.	Chinese.	English and Welsh.	French.	German and Dutch.	Scandinavian.	Indian.	Irish.	Swiss.	Scotch.	People of other Origins.
Prince Edward Island	155	.....	21,568	10,751	1,368	38	281	25,415	1	48,933	381
Nova Scotia	7,062	.....	131,383	40,141	42,101	735	2,125	66,067	1,860	146,027	3,071
New Brunswick	1,638	.....	94,861	56,635	10,683	932	1,401	101,284	41	49,829	3,929
Quebec	141	7	81,866	1,075,130	8,409	648	7,515	123,749	254	54,923	6,385
Ontario	12,097	22	542,232	102,743	210,557	1,578	15,325	627,262	2,382	378,536	30,494
Manitoba	25	4	11,960	9,949	8,804	1,023	6,767	10,173	10	16,506	733
British Columbia	274	4,350	7,596	916	952	236	25,661	3,172	40	3,892	2,370
The Territories	2	.....	1,375	2,896	32	33	49,472	281	.....	1,217	1,138
Totals	21,394	4,383	892,841	1,299,161	282,906	5,223	108,547	957,403	4,588	699,863	48,501

POPULATION OF CITIES AND TOWNS HAVING OVER 5,000 INHABITANTS COMPARED.

NAMES.	PROVINCES.	POPULATION.		Numerical increase or decrease	Percentage.
		1871.	1881.		
Montreal	Quebec	107,225	140,747	33,522	31.21
Toronto	Ontario	56,092	86,415	30,323	54.05
Quebec	Quebec	59,699	62,446	2,747	4.60
Halifax	Nova Scotia	29,582	36,100	6,518	22.03
Hamilton	Ontario	26,716	35,961	9,245	34.60
Ottawa	Ontario	21,545	27,412	5,867	27.23
St. John	New Brunswick	28,805	26,127	* 2,678	* 9.29
London	Ontario	15,826	19,746	3,920	24.76
Portland	New Brunswick	12,520	15,226	2,706	21.61
Kingston	Ontario	12,407	14,091	1,684	13.57
Charlottetown	Prince Edward Island	8,807	11,485	2,678	30.40
Guelph	Ontario	6,878	9,890	3,012	43.79
St Catherines	Ontario	7,864	9,631	1,767	22.46
Brantford	Ontario	8,107	9,616	1,509	18.61
Belleville	Ontario	7,305	9,516	2,211	30.26
Trois-Rivieres	Quebec	7,570	8,670	1,100	14.53
St. Thomas	Ontario	2,197	8,367	6,170	280.83
Stratford	Ontario	4,313	8,239	3,926	91.02
Winnipeg	Manitoba	241	7,985	7,744	3213.27
Chatham	Ontario	5,873	7,873	2,000	34.05
Brockville	Ontario	5,102	7,609	2,507	49.13
Levis	Quebec	6,691	7,597	906	13.54
Sherbrooke	Quebec	4,432	7,227	2,795	63.06
Hull	Quebec	†	6,890	.....	.....
Peterborough	Ontario	4,611	6,812	2,201	47.73
Windsor	Ontario	4,253	6,561	2,308	54.26
St. Henri	Quebec	†	6,415	.....	.....
Fredericton	New Brunswick	6,006	6,218	212	3.49
Victoria	British Colombia	3,270	5,925	2,655	81.19
St. Jean Baptiste(vill'ge)	Quebec	4,408	5,874	1,466	33.25
Sorel	Quebec	5,636	5,791	155	2.75
Port Hope	Ontario	5,114	5,585	471	9.21
Woodstock	Ontario	3,982	5,373	1,391	34.93
St. Hyacinthe	Quebec	3,746	5,321	1,575	42.04
Galt	Ontario	3,827	5,187	1,360	35.53
Lindsay	Ontario	4,049	5,080	1,031	25.46
Moncton	New Brunswick	†	5,032	.....	.....
Totals		494,699	641,703	147,004	29.71

* The indicated decrease of the population of the City of St. John is attributable to the great fire which occurred in the year 1877, when half of the city was laid in ashes. Great numbers were thereby driven into the surrounding districts, and many whose business and social ties were thus severed did not return to the city.

† The limits of the city of Hull and the towns of St. Henri and Moncton not having been defined in 1871, no comparison can be made. Leaving out the above city and towns, the total increase and rate per cent are as represented in the table.

NOTE.—In 1871 there were in Canada twenty cities and towns of 5,000 inhabitants and over, with a total population of 430,043. In 1881, the number of such cities and towns had increased to 37, having a total population of 660,040.

THE CANADIAN CANALS.

ST. LAWRENCE SYSTEM.—The greatlake and river system of Canada has been made continuously navigable for a distance of 2,384 statute miles, by a connecting chain of ten canals, comprising 71¾ miles of artificial navigation. This system extends from the Straits of Belle Isle to Thunder Bay, at the head of Lake Superior.

The following table of distances indicates also the respective positions of these canals, thus:

	Statute Miles.
Straits of Belle Isle to Father Point	643
Father Point to Rimouski	6
Rimouski to Quebec	177
Quebec to Three Rivers (or tide-water)	74
Three Rivers to Montreal	86
Lachine Canal	8½
Lachine to Beauharnois	17¼
Beauharnois Canal	17¼
St. Cecile to Cornwall	32¾
Cornwall Canal	11½
River and Farran's Point Canal	16¼
Rapide Plat Canal	4
River and Point Iroquois Canal	7½
Junction and Galops Canals	4⅝
Prescott to Kingston	66⅜
Kingston to Port Dalhousie	170
Port Dalhousie to Port Colborne (Welland Canal)	27
Port Colborne to Amherstburg	232
Amherstburg to Windsor	18
Windsor to Foot of St. Mary's Island	25
Foot of St. Mary's Island to Sarnia	33
Sarnia to Foot of St. Joseph's Island	270
Foot of St. Joseph's Island to Sault Ste. Marie	47
Sault Ste Marie Canal	1
Head of Sault Ste. Marie to Point aux Pins	7
Point aux Pins to Duluth	390
Total	2,384

SIZE OF LOCKS.—The size of the locks in this system ranges from 200 to 270 feet in length by 45 feet in width. The depth of water is from 9 to 14 feet, and the Government intends to make the whole route fit for vessels of 12 to 14 feet draught of water.

OTTAWA CANALS.—The canal route from Montreal to Ottawa and Kingston has a total length of 246¼ miles, with 59 locks exclusive of the Lachine Canal, and a lockage of 533¼ feet. The new works on this route give nine feet water in locks 45x200 feet.

ST. LAWRENCE AND NEW YORK.—Canal navigation is secured between the St. Lawrence and New York by means of the Richelieu River and Chambly Canal. This has 9 locks, with 7 feet depth of water; and connects by Lake Champlain with the United States Erie Canal, and the Hudson River; a total distance of 411 miles.

TRENT RIVER NAVIGATION.—Of the Trent River Navigation, between Lake Huron and the Bay of Quinte on Lake Ontario, 235 miles, only part has been made navigable, chiefly for the passage of timber; and 155 miles distance is available for light draft vessels.

ST. PETERS CANAL.—Finally, there is the St. Peter's Canal, cut through an isthmus half a mile wide, between St Peter's Bay on the Atlantic, and the Bras d'Or Lakes of Cape Breton. It has a lock 48x200 feet, with a depth of 18 feet and a breadth of 55 feet.